

## MEETING NOTES

September 15, 2011 - Ice Industries (Formerly Grenada Manufacturing) Site, Grenada, MS  
Review and Discussion Re: USEPA Comments and Reviewer's Comments on 2009 Annual Report.  
Thursday, September 15, 2011 9:30 – 12:00  
Brown and Caldwell Offices, Atlanta, Georgia

### Participants:

Meredith Clark Anderson, USEPA  
David Jenkins, USEPA  
David O'Connor, Meritor, Inc.  
Ihsan Al-Fayyomi, Brown and Caldwell, Inc.  
Jim Peeples, Brown and Caldwell, Inc.

1. Introductions
2. BC went through the PowerPoint Presentation (slides attached) with only minimal questions from Meredith and David while we were presenting the information. They provided comments and questions, mostly after our review of the information.
3. Comments provided by David or Meredith and discussions are annotated below with some commentary for context and to indicate the likely course of action for items that were discussed.
  - a. We need to determine the best way to comply with the Progress Report required by the HSWA Permit. It will likely be acceptable to include this in with the Annual Report.
  - b. EPA suggested the following additions to the report to make it better for a new reviewer or for public consumption:
    - i. Include time-series plots in each report and provide more substantial discussions of progress for the main portions of the plume and sub-plumes.
    - ii. Include one or more graphics like the ones provided in our presentation to better show the location of each SWMU and current disposition of each.
    - iii. Include a timeline with the activities completed to date.
    - iv. Include a cross section through the length of the plume that generally provides a representation of the Conceptual Model of the site in terms of groundwater flow and contaminant transport and that shows that the PRB is keyed into the underlying clay zone.
    - v. Improve the formatting of the time series plots and consider placement of the MCL on plots for compounds with MCLs.
  - c. Discussed the TI Waiver for the groundwater zone between source areas and the PRB. USEPA indicated that Region IV has not approved any TI Waivers We have since reviewed the documentation for this and believe that there is either an approved TI Waiver for the Site or the key components that would go into a TI Waiver have been approved by USEPA at several points in the process. We believe that Region IV may not consider this a formal TI Waiver, but that it will serve the same purpose. We are currently documenting the steps that were taken and approved that provide a "substantive" TI Waiver, whether or not it is recognized as an official one by Region IV.
  - d. Discussed the issue of total chromium in groundwater and the indication that this is typically associated with turbidity in the groundwater sample. USEPA suggested that we try to get the turbidity below 10 NTU (something that we would always like to achieve in groundwater sampling, but which is sometimes not attainable) and that the turbidity be documented before and after sample collection. They did not show affinity towards the approach of taking dissolved (filtered samples) along with the total chromium to demonstrate that the chromium is associated with sample turbidity. We will assess options for lowering the

turbidity in the samples (including low flow sampling option) during this next sampling event to determine if this is going to be feasible. We will provide complete documentation of the turbidity measurements – this is not in the monitoring plan or the QAPP at this time, but we will add something, based on the results of our next sampling events, to address this issue. It may be that the best approach is to go to low-flow sampling, and we will look at this option as well.

- e. There was not much discussion regarding the arsenic concentrations in groundwater. It seemed that the explanation provided in the PowerPoint presentation was sufficient on this point. The key issue for all compounds in groundwater is how they are affecting Riverdale Creek (the only complete pathway to receptors for groundwater). The data indicate that there are no arsenic impacts to Riverdale Creek. Given that arsenic is not a Site COC and that there are no affects of arsenic in Riverdale creek, this issue is likely resolved at this point.
  - f. Discussed MW-20 and the fact that there has historically been a low level concentration of chlorinated solvents in this well and has been considered a boundary well in the direction of the closest residential neighborhood. EPA suggested that additional work is needed at this location to demonstrate that the plume width does not go under the neighborhood, and/or that it does not exceed risk-based limits based on a model such as the Johnson Ettinger model.
  - g. There was some discussion regarding the lack of a north boundary for the plume in the vicinity of MW-13. The concentration of chlorinated solvents is increasing in MW-13, although they are still relatively low in concentration. The primary concern is that this well did not have impacted groundwater prior to the installation of the PRB (and the lining of the drainage ditch) and that it is now impacted. It may no longer provide northern edge plume definition near the PRB.
  - h. There was some discussion of the PRB performance and the fact that some of the monitoring wells between the PRB and the river are not meeting compliance goals. It was explained that Meritor had concerns about the potential need to rejuvenate the PRB ahead of the expected schedule, and that discussions and investigations were under way, in conjunction with ETI, to determine if this is the case and to test methods for accomplishing this. EPA was satisfied with this approach, and requested that Meritor provide the results of the investigation to them.
  - i. EPA pointed out that they have been under pressure from a Citizen's group, Citizens of Concern for Environmental Justice, regarding another site in Grenada, and that the Ice Industries Site might receive similar attention in the future.
  - j. There was some discussion regarding the frequency for surface water monitoring. BC began sampling surface water semiannually (rather than quarterly) and dropped SVOCs from the list of parameters at the time that EPA approved the changes to the groundwater monitoring program. However, surface water sampling was not specifically covered by the groundwater monitoring program changes. Meritor should petition to have SVOCs formally removed from the surface water monitoring list and to have the sampling frequency set at semiannual. This should be done before what would be the next quarterly sampling event (in January 2012).
4. Overall, the conversations were open and constructive. The EPA reviewer, David Jenkins, appears to be more knowledgeable and more willing to work with Meritor than might have been interpreted from his review and comments. Meredith Anderson also appears willing to continue to work in a cooperative manner. Meredith will likely want to see a response on the issues of the TI waiver and MW-20, and will want to receive a report regarding the PRB investigation activities.